



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
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March 14, 2011

Ms. Suzanne Hill, NEPA Lead  
Office of Planning and Design Quality  
Public Buildings Service  
National Capital Region  
U.S. General Services Administration  
301 7<sup>th</sup> Street, SW, Room 7600  
Washington, DC 20407

Re: U.S. Department of Homeland Security Nebraska Avenue Complex Master Plan Draft  
Environmental Impact Statement (CEQ #20110009)

Dear Ms. Hill:

In accordance with the National Environmental Policy Act (NEPA) of 1969, Section 309 of the Clean Air Act and the Council on Environmental Quality regulations implementing NEPA (40 CFR 1500-1509), the U.S. Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for the U.S. Department of Homeland Security (DHS) Nebraska Avenue Complex (NAC) in Washington, DC.

The purpose for the Proposed Action is to develop and implement a Master Plan for the NAC as a campus capable of being maintained at the appropriate security level to house DHS. It is intended that the Master Plan would guide future renovation and development of a cohesive campus by establishing design and land-use planning principles for the construction of new buildings, roadways, open green space, utility systems, and other infrastructure needs, while minimizing adverse environmental, economic, and social impacts. The NAC Master Plan is needed to support the goals of the DHS National Capital Region Housing Master Plan which proposes to consolidate 28,000 DHS employees currently housed in more than 40 locations into approximately 7 to 10 locations.

The NAC Master Plan DEIS evaluates three action alternatives and a No Action alternative. The three action alternatives differ in the placement of buildings within the NAC site, the size of buildings, the total number of seats accommodated, the number of parking spaces, and site access and circulation. The action alternatives are as follows:

Alternative A (Low Density Development)—Existing buildings and new construction would equate to approximately 1.1 million GSF of space for DHS and a total of 3,700 seats at the location (1,780 existing seats after demolition plus 1,920 new seats). This alternative would feature 1,025 parking spaces; 925 within the parking garage outside the secure perimeter and 100 spaces inside the secure perimeter.



Alternative B (Mid-Density Development), the Preferred Alternative—Existing buildings and new construction would equate to approximately 1.2 million GSF of space for DHS and a total of 4,200 seats at the location (1,780 existing seats after demolition plus 2,420 new seats). This alternative would feature 1,150 parking spaces with 1,050 outside the secure perimeter and 100 spaces inside the secure perimeter.

Alternative C (High Density Development)—Existing and new construction would equate to approximately 1.3 million GSF of space for DHS and a total of 4,500 seats at the location (1,780 existing seats after demolition plus 2,720 new seats). This alternative would feature 1,225 parking spaces with 1,125 outside the secure perimeter and 100 spaces inside the secure perimeter.

EPA understands the purpose and need for the NAC to house the DHS. However, as a result of our review of the DEIS, EPA has concerns with impacts to wetlands, soils, historic and archaeological resources, and transportation. A detailed description of these concerns is presented in the Technical Comments document (enclosed) for your consideration. EPA rated the DEIS an EC-2 (Environmental Concerns/Insufficient Information), which indicates that we have environmental concerns regarding the proposal and that there is insufficient information in the document to fully assess the environmental impacts of this project. A copy of the EPA's rating system is enclosed for your information.

Thank you for providing EPA with the opportunity to review this project. If you have questions regarding these comments, the staff contact for this project is Karen DelGrosso; she can be reached at 215-814-2765. In addition, Alaina DeGeorgio, NEPA Team, reviewed and commented on the Transportation Study and Transportation Management Plan; her number is 215-814-2741.

Sincerely,



Barbara Rudnick  
NEPA Team Leader  
Office of Environmental Programs

Enclosure (2)



## Technical Comments

### Water Resources/Wetlands

(Page 3-126) The Foundry Branch is a stream that passes through a small portion of the southeast section of the NAC site. It flows south through Glover-Archbold Park and discharges from the storm system into the Potomac River. The Foundry Branch is on the District's Section 303(d) list of impaired waters for metals, bacteria, and dissolved oxygen. As stated on page 3-127, "TMDLs were established and approved for the Foundry Branch for bacteria (fecal coliform) in 2004 and for metals (arsenic, copper, zinc and lead) in 2005. A TMDL for dissolved oxygen has not been established yet and is planned for 2013." Thus, to meet the water quality standards, reductions in the pollutants are required. It is believed that the primary cause of impairments resulted in trace quantities of sediments, organic matter, toxic chemicals, and bacteria carried by stormwater runoff from lawns, rooftops, streets, and parking lots. Proposed stormwater management practices and increased pervious surfaces to be implemented under Alternative B would improve water quality and assist in compliance with the TMDLs established for metals and bacteria. Discuss monitoring and GSA/DHS responsibilities/efforts to ensure TMDLs are met and water quality restored.

(Page 3-128) "The southern drainage is an urbanized and intermittent stream that serves as a drainage way for the NAC site and surrounding properties. The stream flows both above ground and through storm sewer pipes before discharging into the Foundry Branch. The stream is fed from a storm pipe located at the southwestern edge of the site near Ward Circle and Building 60." In addition, "The stream runs along the outside edge of the existing parking lot on the southwest corner of the site. Behind Building 60 it flows through a narrow concrete channel that almost directly abuts the building (Figure 3-37)." Since Building 60 will be demolished describe impacts to the stream from demolition of the building and mitigation measures proposed.

In addition (pages 3-128 and 3-137), grading and construction of Building F (under Alternative B) would occur in the vicinity of the southern drainage stream which runs behind Building 60. Building F is a new building with four levels above ground and one level below that would require excavation. This area has slopes of 20 percent or greater. Although grading should be restricted to outside of the flood limits of the stream, it is probably not feasible since the stream directly abuts Building 60. It is thought that retaining walls may be employed. However, if they are not feasible, a by-pass storm drainage line may be installed that would be designed to handle flooding storm events and provide overland relief to prevent flooding in Building F. It is recognized that the stormwater system and the existing natural channel must be analyzed to show that there would be adequate outfall and that no downstream structures would be affected by the storm by-pass line. It would have been prudent to have the analysis and results complete and incorporated into the DEIS to ensure feasibility of building close to the stream. Please explain potential impacts from the retaining wall to the stream. Is it possible to decrease size of the parking garage? Is there room to move the footprint of the garage away from the stream? Also, please discuss adherence to the Federal Environmental Element policy: "Discourage development in areas of identified high erosion potential on slopes with a gradient of 15 percent and above, and on severely eroded soils. Excessive slopes (25 percent and above) should remain undeveloped."



(Page 3-139) The DEIS states that grading and construction of Building F (for Alternative B) would not further encroach on the stream or the portion of the adjacent low-lying area that could be a wetland area. “The stream and surrounding area are outside of the portion of the site included in the 1995 wetlands delineation. Therefore, prior to construction of Building F, a preliminary assessment of the area would have to occur and a wetlands delineation would be required if the area were determined to have the potential to be a wetland.” Since wetland delineation has not been conducted, wetland impacts are unclear. Wetlands should be identified and impacts defined in the FEIS.

The DEIS states that a letter was sent to the U.S. Army Corps of Engineers (COE), Baltimore District, in June 2010 to request information regarding any potential wetlands present on the site. However, at the publication of the DEIS, no additional information had been received. The letter referenced was not included in the DEIS. It is requested that this information is pursued from the COE to determine if the Proposed Action will impact wetlands.

It is important to note that wetlands present on, or immediately surrounding the site should be delineated according to the 1987 Federal Manual for Identifying and Delineating Jurisdictional Wetlands. Impacts to wetlands should be avoided or minimized whenever possible. The total size of the wetlands should be provided, in addition to the size of the wetland in the study area and size of the direct impact. Indirect impacts to wetlands must also be analyzed and discussed. The EIS must analyze the size and functional values of all impacted wetlands and develop a mitigation plan for their replacement.

As noted on page 3-130, “The National Wetlands Inventory does not identify any wetlands within the site boundary. However, linear wetlands are not available on the National Wetlands Inventory Wetlands Mapper.” According to the map of “Known Wetlands within the District of Columbia” from the 1997 D.C. Wetland Conservation Plan, there are no known wetlands on the NAC site.” However, Figure 3-40 depicts an area labeled “Potential for Wetlands (Further Study Needed) which is within the project site boundary. This area should be evaluated to determine the presence of wetlands on the site and the potential impact to this resource should be discussed.

(Page 3-130) “In 1995, a wetlands delineation was performed for the northern drainage area near the northeastern perimeter of the NAC, and the Foundry Branch. The delineation determined that wetlands did not extend outside of the stream channels. The wetland delineation did not address the remainder of the NAC site.” Please delineate the potential wetlands within the stream channel especially the portion of the channel that is within the project site boundary in the southeastern area.

(Page 3-189) “Wetlands were identified on the site within the stream channels located at the perimeter of the site. The stream channels and any potential wetlands on the north, northeastern and southeastern perimeters of the site would not be directly impacted due to their location on steep slopes and due to security setbacks.” Please note that any wetlands in the stream channels and on site must be delineated even if no direct impact is proposed. Indirect impacts to wetlands that could result from the Proposed Action should be discussed.



## **Soils**

As stated in the DEIS (page 3-111) "...if a depth to bedrock of 32 to 38 feet is accurate across the NAC site, bedrock may be encountered when building the parking garage in Alternative B." However, the depth to bedrock is unknown since test borings have only been conducted at limited locations, namely near Building 61. It is understood that further studies would need to be conducted prior to construction. Please discuss the reason for test borings and why testing was conducted only near Building 61. Also, discuss the environmental concerns, if any, if bedrock is encountered when building the parking garage.

Page 3-119 states, "Development on steep slopes would increase erosion and sedimentation within the Foundry Branch. Also, as the soils have been previously altered, soil stability is largely unknown." What is the likelihood of developing on steep slopes? For Alternative B (Preferred Alternative), Buildings B, C, D and the parking garage abut the Glover-Archbold Park where the property slopes. What is the gradient of the slopes in this area? Discuss potential environmental impacts.

As indicated on Page 3-121, "Six acres of the site contain slopes greater than 20 percent; these areas mostly line the southern and eastern perimeter of the NAC, particularly along its border with Glover-Archbold Park." Page 3-124 states, "A portion of the area in which the new Building B would be sited in the northeast area of the site features a significant slope change; this area would likely require alteration such as filling for construction. This alternative would result in minor to moderate, adverse, long-term, direct impacts on topography." Again, please identify the gradient of the slope in the area of Building B and discuss potential impacts to the soils (and other resources such as Foundry Branch and possible wetlands in the channel).

Page 3-112 identifies the following measures to reduce impacts to geology: "Soil/Slope stabilization measures, such as closely spaced drilled piers, could be used if development on steep slopes or the use of retaining walls is ultimately proposed. Construction equipment should also be confined to areas away from steep slopes to greatest extent possible where potentially unstable geologic resources could exist. Detailed Geotechnical studies should be completed for specific locations prior to construction." Evaluation and studies should be conducted prior to site planning to avoid sensitive areas and potential impacts to resources.

Also, the Federal Environmental Element (page 3-18) policy relevant to the NAC Master Plan is as follows: "Discourage development in areas of identified high erosion potential, on slopes with a gradient of 15 percent and above, and on severely eroded soils. Excessive slopes (25 percent and above) should remain undeveloped." Discuss adherence to this policy and approval authority.

## **Historic and Archaeological Resources**

(Page 3-81) The National Register nomination for the NAC site is under development and ongoing consultation is occurring. How will the Proposed Action affect the integrity of the National Register-eligible historic district since determination has not been made yet and some buildings are still under consideration (Buildings 15 and 18)? The purpose of the Master Plan is



intended to be a guide for future development. There is concern that additional development may impact the integrity of the National Register-eligible historic district. Please discuss if there are limitations on density for the site and measures to ensure enforcement so that integrity of the site is not impacted in the future.

(Page 3-107) “One archeological site and an area that yielded prehistoric and historic resources have been discovered during site investigations. The site investigations found that there are surviving resources with integrity.” The DEIS did not identify the location of the archaeological site nor did it discuss the potential impacts from the Proposed Action. Please identify the archaeological site on a map in relation to the proposed development for the Preferred Alternative.

In addition, “Isolated, small areas may be undisturbed, primarily in the northeastern portion of the campus. The undisturbed areas may include prehistoric resources or resources associated with the seminary or Navy use of the property.” What plans will be in place if resources are found?

Page 3-108, “Construction of Buildings A and B may disturb areas around extant Buildings 81 and 101; however, archaeological potential in this area is low.” Both Buildings 81 and 101 are located within the northeastern portion of the campus where the potential for prehistoric resources or resources associated with the seminary or Navy use of the property may be found. Demolition is proposed for Buildings 81 and 101. In addition, the site plans for the action alternatives propose construction in place of Buildings 81 and 101, thus the potential impact to potential resources appears to be greater than “low.” Please provide further explanation of the potential impact and mitigation proposed.

### **Hazardous Materials, Waste and Contamination**

In 2004 an Environmental Condition Property Survey for Nebraska Avenue Complex was completed by Tetra Tech NUS, Inc. This survey was completed in order to facilitate a transfer of NAC property from the U.S. Navy (Navy) ownership to the GSA. Environmental hazards were identified and categorized by Environmental Condition of Property (ECP) Area Types.

Table 3-9 lists ECP Area Types. Each ECP area is identified and the locations discussed. However, Figure 3-41, map of ECP Areas, shows more ECP areas than what is discussed in Table 3-9. For instance, ECP Area Type 5 discusses two areas in Table 3-9, but shows three areas on the map in Figure 3-41; ECP Area Type 4 discusses two areas in Table 3-9, but identifies three areas on the map; and ECP Area Type 3 discusses five areas in Table 3-9, but shows six areas on the map. Please explain discrepancy and provide additional information on areas not discussed.

The DEIS (page 3-161) identifies two ECP Type 5 areas where cleanup was complete but no written approval provided so the areas still remain classified as ECP Area Type 5. More specifically, a Toxic Substances Control Act (TSCA) cleanup was performed by the Navy on a catch basin that was found to contain PCBs; and contaminated soils were removed. PCBs were



also found in segments of the North Drainage where surface soils and sediment were excavated during a removal action. The Navy performed a Remedial Investigation/Feasibility Study which determined that no further action was necessary for either area designated as ECP Area Type 5. The basis for this determination was that no human or ecological risk was identified. However, at the time of the Tetra Tech study, the Navy was still waiting for written concurrence from the EPA and DC Department of Health (DCDOH). Please discuss follow-up and agency responsibility. Documentation of the Navy's efforts to communicate completed work to approving authorities should be provided. Also, discuss approval authority to ensure compliance for those areas not yet cleared for completion.

(Page 3-163) "According to the District of Columbia's "Closed Leaking Underground Storage Tank (LUST) cases" records, there was a leaking underground storage tank at Building 4 in 1991." District of Columbia records indicate that soil and groundwater contamination occurred and that the LUST case was closed with the District in 1997." Please explain further. Was the tank properly abandoned and filled? Were contaminated soils treated and/or removed? How was groundwater contamination handled?

Page 3-164 states, "No closure records exist for a 275 gallon UST that is shown on a map in a 1997 Emergency Planning and Community Right to Know Act report, however it is suspected that the tank was an above ground storage tank (Tetra Tech 2004)." Please explain this statement and how the conclusion was derived. The map shows an underground storage tank. Is the UST still in place? Are there records indicating proper abandonment practices were implemented? If there is or was an UST, why would there be suspect that the tank was an above ground storage tank?

### **Low Impact Development**

The DEIS states (page 3-278) that under Alternative B, a total of approximately 133,250 GSF of vegetated green roof space would be installed across portions of six buildings and the site's new multi-level parking deck. However, under Alternative C, a total of approximately 239,960 GSF of vegetation green roof space would be installed across portions of three buildings and the site's new multi-level parking deck. Please explain how the GSF of vegetation green roof space is derived and or determined? Alternative C offers the largest gross square feet of green roof space on three buildings (plus parking deck) as opposed to Alternative B which is spread over six buildings (plus parking deck). Discuss the opportunity to increase the green roof space on more buildings in the Preferred Alternative.

### **Transportation**

Page 3-188 states that "As part of the Transportation Study, peak hours were established by identifying the peak 60 minutes of traffic during the weekday AM and PM peak hours for all study area intersections. From these traffic counts, the network peak hours were determined to be 7:45 to 8:45 AM and 5:15 to 6:15 PM." However, page 3-195 states, "The absolute peak hour occurs during the mid-afternoon hour of 2:00 p.m. to 3:00 p.m." Please explain why the absolute peak hour of 2:00 p.m. to 3:00 p.m. was not included in the analysis.



Page 3-210 mentions that DHS would commit to appointing an Employee Transportation Coordinator (ETC) for the NAC to help meet the Transportation Management Plan goals. The DEIS describes the role and responsibilities of the ETC. One of which is to meet with the Community Transportation Working Group to maintain an open dialogue with the key stakeholders in the community. Please identify and describe the Community Transportation Working Group as well as explain and differentiate its role with the ETC.

As indicated in the DEIS, the intersection of Ward Circle and Massachusetts Avenue (West) AM will have an increase in LOS from E (existing conditions) to LOS F (Proposed Action). This intersection is under separate study by the District of Columbia Department of Transportation (DDOT). Improvements will be identified as part of the Rock Creek West 2 Livability Study. Please provide most recent information/developments/plans for improvement of this intersection in the FEIS and coordination efforts with GSA/DHS.

The DEIS identifies a total of 34 parking spaces at the NAC as Americans with Disabilities Act (ADA) accessible. Table 3-21 identifies the number and location of ADA Parking spaces on site. The total number of parking spaces decreases in the Preferred Alternative (1,239 existing spaces to 1,150 spaces for Alternative B). How many ADA spaces will be designated for the Proposed Action?

The following comments address the NAC Master Plan Transportation Study and Transportation Management Plan (Appendices B, C and D).

### **Appendix B**

- Please clarify how peak hour driveways trips were generated. If tube counts were taken, why weren't they used to generate peak hour trips? It appears that peak hours were based on the surrounding traffic network as opposed to the "absolute peak hour" for NAC. The results from the tube study appear to show that existing volumes at NAC driveways are already above those amounts generated for future peak hour driveways trips.
- The method for trip generation involved dividing the peak hour driveway volume by the number of parked vehicles (869) to develop trip rates per occupied parking space. Is this an accurate representation of trip generation? Please explain.
- What is the true correlation between residential locations and directions of approach? Were residential zip codes generated by the surveys correlated to responses regarding method of transportation to the work site? Do employees from certain residential locations have a higher likelihood to drive or take public transportation? Clarify if the information found in Table 19 assumes that employees from each area commute equally.
- How does information found in Table 19 compare to values generated from tube studies done at NAC for which driveway was found to be most active? The table estimates that about 30% of employees will approach from either direction off Massachusetts Ave. Information shown in Figure 8 indicates that Massachusetts Avenue driveway generates the greatest volume, with peaks well over 100.
- Information presented in Section 6.2.6 state that forecasted peak hour volumes at driveways do not warrant signalization. Clarify why the Massachusetts Avenue driveway, which has a right and left turn lane, was only considered for signalization review to be one lane, including only left turns. Consider the possibility of using





driveway totals for the Massachusetts Avenue driveway as opposed to left turn only for signalization review.

- Peak hour volumes seen in Table 23 do not appear to correspond with peak volumes shown in Table 22. Please clarify this point.
- Worst case scenario conditions were discussed in Sections 7.1 and 8.3. The alternative that represents the highest trip generating potential as described in these sections is Alternative C. While this alternative may represent the greatest increase in the number of seats at NAC, it may not represent the worst case scenario for traffic into or out of the facility. Alternative B, 4200 seats, limits all non-secure vehicular traffic to enter and exit through the Massachusetts Avenue driveway. Alternative C, 4500 seats, allows non-secure vehicular traffic on South Nebraska Avenue and Massachusetts Avenue driveways. Figures A-10 and A-11 indicate that Alternative B has higher volumes than Alternative C. It may be more representative of conditions if worst case scenarios were determined for each driveway.
- Table 25 shows the proposed level of service (LOS) and delay, seconds per vehicle for Albemarle Street and Fort Drive/40<sup>th</sup> Street with and without an all-way stop. It is not clear if the addition of an all-way stop is proposed to be installed as part of the NAC Master Plan or to be installed through other means. It is evident that an all-way stop is beneficial but it should be made clear whether or not these improvements are planned to be made.
- The addition of NAC trips is said to result in the increased delay of 3.9 seconds per vehicle. At what level of increased delay will action be taken to reduce delay, seconds per vehicle?
- What action, if any, is proposed to alleviate poor LOS and high wait time at the Massachusetts Avenue driveway exit for left turns? At what point will the wait time reach a level that will warrant action? Will any efforts be made to reduce queuing at NAC driveways?
- Why is it expected that more people will begin using the Nebraska Avenue South driveway at greater proportions and frequency than is currently observed? Data presented in the document appears to show that the majority of drivers at the current NAC site use the Massachusetts Avenue driveway. Why would drivers switch their driving behaviors under the Action Alternatives?
- Please clarify the difference between secure and non-secure vehicles. What percentage of vehicles currently entering NAC are secure versus non-secure? Alternative B only allows for the exiting of secure vehicles through the South Nebraska Avenue driveway. Have steps and time to pass through the secure vehicle check-point been taken into account in determining volumes at driveways?
- The document states that left turns into the NAC facility from southbound Massachusetts Avenue is currently prohibited during peak hours and will continue to be prohibited under all action alternatives. While the traffic motion is currently prohibited, it is not fully observed by all those entering the facility. Page 21 states that GSA is in the process of implementing mitigation to enforce the turn prohibition. Please describe mitigation steps. Why can it not be assumed that vehicles entering NAC in the future will not continue to make this illegal traffic motion? This should be taken into account. Has any consideration or traffic modeling been given should this turn motion be allowed in the future? If the motion were permitted, what would the estimated peak volume be? Would



it be great enough to warrant signalization? How will the turn prohibition affect shuttle routes under each action alternative?

- Figure A-9, intersection 27 lacks information for through traffic and left turns into NAC. Is it assumed that no left turns into this driveway will be made?
- Will any changes be made or will there be any loss of existing on-street parking? Please include any information should changes to parking be included in any of the action alternatives.
- The document does not appear to discuss traffic analysis or traffic alterations that will be needed during the construction of the action alternatives. How is this issue being addressed?

### **Appendices C and D**

- How do the positions of the ETC and the current transit coordinator differ? What responsibilities or tasks will the ETC do that the existing transit coordinator does not?
- What are the existing NAC parking standard operating procedures? Can any improvements be made to these at this time?

